



# Supply contract for radiation resistant cables

## Strategy Update

### DR -10598714

### IT 5062/EN

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6<sup>th</sup> December 2024

[Indico 1484507](#)

# Summary

- Strategy Update based on firm answers
- Tender document status
- Next steps

# Strategy Update based on Firms Answers

- Summary of meetings with Suppliers (Axon, Heatsense and Allectra)

Suppliers	Lead Times	Minimum Quantity	Adjudication Per Type	Connector Manufacturing	Category (2/3)	240mm <sup>2</sup> Power Cable Manufacturing
Heatsense	2 weeks if cable types in stock or 8 weeks if produced new	depends on the cable type but 500m was discussed	Yes	No (Subcontracts)	2,3	No
Allectra	2 weeks if cable types in stock or 8-10 weeks if produced new	depends on the cable type again but 500m-1000m was discussed	Yes	No	3 (cat.2 not possible)	No (max 6 mm equivalent to ~25 mm <sup>2</sup> )
Axon	2/3 weeks if cable types in stock or 8-10 weeks if produced new	depends on the cable type but 100-500m was deemed possible	Yes	Yes	2,3	No

- The strategy defined at the kick-off meeting can be confirmed :

- ❖ Adjudication per type
- ❖ 500 m MOQ (Axon – 100m)
- ❖ Signal cables only
- ❖ Cat.2 and Cat.3
- ❖ 10 week lead time
- ❖ Added connector as an option

# Tender documents status

- Technical Specification
  - Invitation to Tender: IT-5062/EN – draft documents can be found [here](#)
  - Connector included as option
  - Annex
    - CTS – **Done** [SCE-SSC]
      - Cat 2/3 is strictly identical to Cat1 Spec except that Radiation resistant requirement is added.
    - Annex A → F (Radiation Req, Fire Requirement, Cable Marking, Testing, Logistics, Marking + Colours) – **Done** [SCE-SSC, HSE OHS, IPT-PI]
    - Annex G – Optional Connectors – **Ongoing** [EN-EL]
      - Connector types to include as an option:
        - **1HVPF** (SCEM - 09.41.25.130.5) - Used in CBH50
        - **19BSFB** (SCEM - 09.31.05.152.6 ) – Used in NE18
        - \*12SPMBS – Used in SVA3
- Tender Form
  - Created
  - Annex
    - Annex 1 – Cable Types - **Done** [IPT-PI]
      - Confirmation of cable type code confirmed by standardisation comity for Cat 3....
    - Annex 2 – Copper Weight – **Ongoing** [SCE-SSC]
  - Volume to be confirmed by EN-EL.  
New request received from BE-CEM for HL-LHC.  
→ Final volume will be defined after the spec review, just before firm release

# Next Steps...

R	Responsible
C	Consulted
I	Informed
A	Accountable

- Peer review foreseen for the 13<sup>th</sup> December with the IT 5062/EN Responsible personnel

Topic	SCE-SSC (TECH 1)	EN-EL (TECH 2)	IPT-PI (COM)	HSE CARE + OHS	ATS Spec. Com.	Cable and Connector Standardisation Committee
Definition of radiation resistance volumes	I	R	I	I	N/A	N/A
DR	C	R	I	I	N/A	N/A
Updating of the IT Technical specifications	C	R	C	C	C	C
Updating of the IT Tender Form and quality controls	R	R	R	C	C	C
Management of Contract	A,R	C	R	C	N/A	C

- After documents will be sent to all department responsible and to the ATS Spec. committee
- Representatives known so far..

Group	Name
SY	Daniel Valuch
TE	?? (not defined)
BE	Gianluca Canale
<b>Standardisation Committee</b>	Simao Pedro Costa Machado

# Back-Up Slides

# Tentative Timeline

Task	2024			2025											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Estimated Volume (through Gesmar + DICs + user inputs)	Yellow	Yellow													
Release Department Request	Green														
Kickoff Meeting		Green													
Specification and Tender Form		Yellow	Yellow												
Send Invitation to Tender				Yellow											
Receipt of Tenders					Yellow										
Letter of Intent						Yellow									
Present to Financial Committee									Yellow						
First Orders (Limited Volume)							Yellow								
First Delivery (pre-series)											Yellow				
Acceptance Tests												Yellow	Yellow		

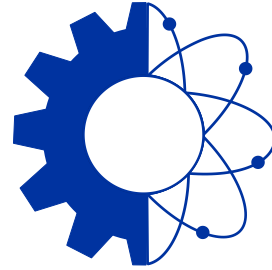
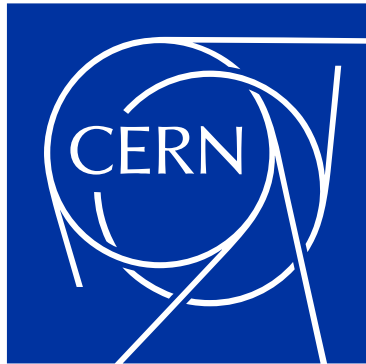
# Volume



Cable Family	Identified RRC types	Expected Volume over 5 years* (m)	Location
Coaxial	CBRH50	2000	TS2/TCC2
	CBR50	1000	TCC2/TDC2
Flexible Multicore	NER12	100	TCC2
	NER18	3,000	TS2/TCC2
	NER4	4000	TS2/TCC2
	NER48	700	TS2
	NER64	TBC	TCC2/TDC2
	NER8	2000	TS2/TCC2
	NER28	500	New
	NFR12	1,000	TS2/TCC2
	NGR28	570	TS2/TCC2
	NGR4	2000	TS2/TCC2
	PJR5SJ (NJR5)	600	TS2
Special Cable	SVAR3	8,000	TS2/TCC2
	TFAR3	1,500	TS2
<b>Grand Total (m)</b>		<b>26 970</b>	

\*Includes some replacement cables existing in the machines + new requests





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